OFFICE OF NAVAL RESEARCH

BRANCH OFFICE

LONDON, ENGLAND

TECHNICAL REPORT ONRL-57-65

MATHEMATICS IN NORTHERN AND SOUTHERN IRELAND

BY

BERNARD EPSTEIN

1 December 1965



This document is issued for the information of U.S. Government scientific personnel and contractors. It is not part of the scientific literature and must not be cited, abstracted, reprinted, or given further distribution.

MATHEMATICS IN NORTHERN AND SOUTHERN IRELAND

This report is based on a visit made to the cities of Belfast, Dublin, and Galway during the first week of June 1965. The following institutions were visited:

- (a) Queen's University, Belfast
- (b) University of Dublin
- (c) National University of Ireland, Dublin Branch
- (d) Dublin Institute for Advanced Studies
- (e) National University of Ireland, Galway Branch

As will be brought out more fully below, the state of mathematical research and instruction (and undoubtedly this comment has some validity for many other disciplines as well) is much happier in Northern Ireland (Ulster) than in the independent Republic of Ireland (Eire). The reasons for this marked difference are evidently rooted in political, religious, and economic problems that have plagued the island for many centuries and, although the writer's primary objective is to describe Ireland's current mathematical activities, it seems quite essential to discuss the social problems insofar as they appear to affect the academic institutions.

The entire island has an area of some 30,000 square miles and 4.5 million people. Ulster, often referred to as "The Six Counties" in the Republican press, contains one-sixth of the area and one-third of the population, but it enjoys a far greater degree of industrialization, particularly ship-building and aircraft construction, than Eire, "The Twenty-six Counties." The presence in the Belfast area of a strong Scottish minority, with its tradition of intellectual and technical ability, has certainly played an important role in building a strong university and an economy far more viable than that of Eire. However, economic conditions in Ulster are not entirely satisfactory; this is due largely to the decline in shipbuilding, the area's leading heavy industry.

Most of the remainder of this report will be divided into two main portions, the first consisting of commentary on the impressions obtained by visiting the various institutions listed above, the second of a description of some of the mathematical research being conducted at these institutions.